WHAT IS CLAIMED IS:

1. A cell search control method by which a mobile station searches for a perch channel transmitted by a base station to capture and receive the perch channel, and determines which base station to communicate with or to be standby for, said cell search control method comprising:

a measuring step of measuring receiving quality of a currently captured perch channel; and

a control step of determining a frequency of searching for a new perch channel in response to the receiving quality measured by said measuring step.

2. The cell search control method as claimed in claim 1, wherein

said measuring step measures received power of the currently captured perch channel; and

said control step controls the frequency of searching for a new perch channel in response to the highest received power measured by said measuring step such that when the highest received power is high, the frequency of searching for a new perch channel is low, whereas when the highest received power is low, the frequency of searching for a new perch channel is high.

3. The cell search control method as claimed in claim 1, wherein

said measuring step measures received power of the currently captured perch channel; and

said control step controls the frequency of searching for a new perch channel in response to the ratio of the second highest received power to the highest received power measured by said measuring step such that when the ratio is high, the frequency of searching for a new perch channel is high, whereas when the ratio is low, the frequency of searching for a new perch channel is low.

4. The cell search control method as claimed in claim 1, wherein

said measuring step measures received power of the currently captured perch channel; and

said control step controls the frequency of searching for a new perch channel in response to the number of perch channels with received power whose ratio to the highest received power measured by said measuring step is greater than a predetermined value such that when the number of perch channels is great, the frequency of searching for a new perch channel is high, whereas when the number of perch channels is small, the frequency of searching for a new perch channel is low.

5. The cell search control method as claimed in claim 1, wherein

said measuring step measures a received SIR of the

currently captured perch channel; and

said control step controls the frequency of searching for a new perch channel in response to the highest received SIR measured by said measuring step such that when the highest received SIR is high, the frequency of searching for a new perch channel is low, whereas when the highest received SIR is low, the frequency of searching for a new perch channel is high.

6. The cell search control method as claimed in claim 1, wherein

said measuring step measures a received SIR of the currently captured perch channel; and

said control step controls the frequency of searching for a new perch channel in response to the ratio of the second highest received SIR to the highest received SIR measured by said measuring step such that when the ratio is high, the frequency of searching for a new perch channel is high, whereas when the ratio is low, the frequency of searching for a new perch channel is low.

7. The cell search control method as claimed in claim 1, wherein

said measuring step measures a received SIR of the currently captured perch channel; and

said control step controls the frequency of searching for a new perch channel in response to the number of perch

channels with a received SIR whose ratio to the highest received SIR measured by said measuring step is greater than a predetermined value such that when the number of perch channels is great, the frequency of searching for a new perch channel is high, whereas when the number of perch channels is small, the frequency of searching for a new perch channel is low.

8. The cell search control method as claimed in claim 1, further comprising:

an extracting step of decoding a received perch channel, and extracting transmission power information, the perch channel including its own transmission power information, wherein

said measuring step measures received power of a currently captured perch channel; and

said control step obtains a propagation loss between the mobile station and a base station that transmits the perch channel from the received power measured by said measuring step and the transmission power of the perch channel with the received power extracted by said extracting step, and controls the frequency of searching for a new perch channel in response to the minimum propagation loss obtained such that when the minimum propagation loss is high, the frequency of searching for a new perch channel is high, whereas when the minimum propagation loss is low, the frequency of searching for

a new perch channel is low.

9. The cell search control method as claimed in claim 1, further comprising:

an extracting step of decoding a received perch channel, and extracting transmission power information, the perch channel including its own transmission power information, wherein

said measuring step measures received power of a currently captured perch channel; and

said control step obtains a propagation loss between the mobile station and a base station that transmits the perch channel from the received power measured by said measuring step and the transmission power of the perch channel with the received power extracted by said extracting step, and controls the frequency of searching for a new perch channel in response to the ratio of the second minimum propagation loss to the minimum propagation loss obtained such that when the ratio is low, the frequency of searching for a new perch channel is high, whereas when the ratio is high, the frequency of searching for a new perch channel is low.

10. The cell search control method as claimed in claim 1, further comprising:

an extracting step of decoding a received perch channel, and extracting transmission power information,

the perch channel including its own transmission power information, wherein

said measuring step measures received power of a currently captured perch channel; and

said control step obtains a propagation loss between the mobile station and a base station that transmits the perch channel from the received power measured by said measuring step and the transmission power of the perch channel with the received power extracted by said extracting step, and controls the frequency of searching for a new perch channel in response to the number of perch channels with a propagation loss whose ratio to the minimum propagation loss obtained is less than a predetermined value such that when the number of the perch channels is great, the frequency of searching for a new perch channel is high, whereas when the number of the perch channels is small, the frequency of searching for a new perch channel is low.

11. A cell search control method by which a mobile station searches for a perch channel transmitted by a base station to capture and receive the perch channel, and determines which base station to communicate with or to be standby for, said cell search control method comprising:

a measuring step of measuring transmission power of a signal to be transmitted to the base station that the mobile station currently communicate with or is currently

standby for; and

a control step of controlling a frequency of searching for a new perch channel in response to the lowest transmission power measured by said measuring step such that when the lowest transmission power is high, the frequency of searching for a new perch channel is high, whereas when the lowest transmission power is low, the frequency of searching for a new perch channel is low.

12. A cell search control method by which a mobile station searches for a perch channel transmitted by a base station to capture and receive the perch channel, and determines which base station to communicate with or to be standby for, said cell search control method comprising:

a detecting step of detecting a moving speed of the mobile station; and

a controlling step of controlling a frequency of searching for a new perch channel in response to the moving speed detected by said detecting step such that when the moving speed is high, the frequency of searching for a new perch channel is high, whereas when the moving speed is low, the frequency of searching for a new perch channel is low.

13. A mobile station which searches for a perch channel transmitted by a base station to capture and receive the perch channel, and determines which base station to

communicate with or to be standby for, said mobile station comprising:

measuring means for measuring receiving quality of a currently captured perch channel; and

control means for determining a frequency of searching for a new perch channel in response to the receiving quality measured by said measuring means.

14. The mobile station as claimed in claim 13, wherein

said measuring means measures received power of the currently captured perch channel; and

said control means controls the frequency of searching for a new perch channel in response to the highest received power measured by said measuring means such that when the highest received power is high, the frequency of searching for a new perch channel is low, whereas when the highest received power is low, the frequency of searching for a new perch channel is high.

15. The mobile station as claimed in claim 13, wherein

said measuring means measures received power of the currently captured perch channel; and

said control means controls the frequency of searching for a new perch channel in response to the ratio of the second highest received power to the highest received power measured by said measuring means such that when the ratio is high, the frequency of searching for a

new perch channel is high, whereas when the ratio is low, the frequency of searching for a new perch channel is low.

16. The mobile station as claimed in claim 13, wherein said measuring means measures received power of the currently captured perch channel; and

said control means controls the frequency of searching for a new perch channel in response to the number of perch channels with received power whose ratio to the highest received power measured by said measuring means is greater than a predetermined value such that when the number of perch channels is great, the frequency of searching for a new perch channel is high, whereas when the number of perch channels is small, the frequency of searching for a new perch channel is low.

17. The mobile station as claimed in claim 13, wherein said measuring means measures a received SIR of the currently captured perch channel; and

said control means controls the frequency of searching for a new perch channel in response to the highest received SIR measured by said measuring means such that when the highest received SIR is high, the frequency of searching for a new perch channel is low, whereas when the highest received SIR is low, the frequency of searching for a new perch channel is high.

18. The mobile station as claimed in claim 13, wherein said measuring means measures a received SIR of the currently captured perch channel; and

said control means controls the frequency of searching for a new perch channel in response to the ratio of the second highest received SIR to the highest received SIR measured by said measuring means such that when the ratio is high, the frequency of searching for a new perch channel is high, whereas when the ratio is low, the frequency of searching for a new perch channel is low.

19. The mobile station as claimed in claim 13, wherein said measuring means measures a received SIR of the currently captured perch channel; and

said control means controls the frequency of searching for a new perch channel in response to the number of perch channels with a received SIR whose ratio to the highest received SIR measured by said measuring means is greater than a predetermined value such that when the number of perch channels is great, the frequency of searching for a new perch channel is increased, whereas when the number of perch channels is small, the frequency of searching for a new perch channel is low.

20. The mobile station as claimed in claim 13, further comprising:

extracting means for decoding a received perch

channel, and for extracting transmission power information, the perch channel including its own transmission power information, wherein

said measuring means measures received power of a currently captured perch channel; and

said control means obtains a propagation loss between the mobile station and a base station that transmits the perch channel from the received power measured by said measuring means and the transmission power of the perch channel with the received power extracted by said extracting means, and controls the frequency of searching for a new perch channel in response to the minimum propagation loss obtained such that when the minimum propagation loss is high, the frequency of searching for a new perch channel is high, whereas when the minimum propagation loss is low, the frequency of searching for a new perch channel is low.

21. The mobile station as claimed in claim 13, further comprising:

extracting means for decoding a received perch channel, and for extracting transmission power information, the perch channel including its own transmission power information, wherein

said measuring means measures received power of a currently captured perch channel; and

said control means obtains a propagation loss between

the mobile station and a base station that transmits the perch channel from the received power measured by said measuring means and the transmission power of the perch channel with the received power extracted by said extracting means, and controls the frequency of searching for a new perch channel in response to the ratio of the second minimum propagation loss to the minimum propagation loss obtained such that when the ratio is low, the frequency of searching for a new perch channel is high, whereas when the ratio is high, the frequency of searching for a new perch channel is low.

22. The mobile station as claimed in claim 13, further comprising:

extracting means for decoding a received perch channel, and for extracting transmission power information, the perch channel including its own transmission power information, wherein

said measuring means measures received power of a currently captured perch channel; and

said control means obtains a propagation loss between the mobile station and a base station that transmits the perch channel from the received power measured by said measuring means and the transmission power of the perch channel with the received power extracted by said extracting means, and controls the frequency of searching for a new perch channel in response to the number of perch

channels with a propagation loss whose ratio to the minimum propagation loss obtained is less than a predetermined value such that when the number of the perch channels is great, the frequency of searching for a new perch channel is high, whereas when the number of the perch channels is small, the frequency of searching for a new perch channel is low.

23. The mobile station as claimed in claim 13, wherein said mobile station monitors paging to itself by intermittent reception in a standby mode.

24. A mobile station which searches for a perch channel transmitted by a base station to capture and receive the perch channel, and determines which base station to communicate with or to be standby for, said mobile station comprising:

measuring means for measuring transmission power of a signal to be transmitted to the base station that the mobile station currently communicate with or is currently standby for; and

control means for controlling a frequency of searching for a new perch channel in response to the lowest transmission power measured by said measuring means such that when the lowest transmission power is high, the frequency of searching for a new perch channel is high, whereas when the lowest transmission power is low, the

frequency of searching for a new perch channel is low.

25. The mobile station as claimed in claim 24, wherein said mobile station monitors paging to itself by intermittent reception in a standby mode.

26. A mobile station which searches for a perch channel transmitted by a base station to capture and receive the perch channel, and determines which base station to communicate with or to be standby for, said mobile station comprising:

detecting means for detecting a moving speed of the mobile station; and

control means for controlling a frequency of searching for a new perch channel in response to the moving speed detected by said detecting means such that when the moving speed is high, the frequency of searching for a new perch channel is high, whereas when the moving speed is low, the frequency of searching for a new perch channel is low.

27. The mobile station as claimed in claim 26, wherein said mobile station monitors paging to itself by intermittent reception in a standby mode.

28. A mobile communications system including a plurality of base stations and a mobile station which searches for

perch channels transmitted by the plurality of base stations to capture and receive the perch channels, and determines which base station to communicate with or to be standby for, said mobile station comprising:

measuring means for measuring receiving quality of a currently captured perch channel; and

control means for determining a frequency of searching for a new perch channel in response to the receiving quality measured by said measuring means.

29. A mobile communications system including a plurality of base stations and a mobile station which searches for perch channels transmitted by the plurality of base stations to capture and receive the perch channels, and determines which base station to communicate with or to be standby for, said mobile station comprising:

measuring means for measuring transmission power of a signal to be transmitted to the base station that the mobile station currently communicate with or is currently standby for; and

control means for controlling a frequency of searching for a new perch channel in response to the lowest transmission power measured by said measuring means such that when the lowest transmission power is high, the frequency of searching for a new perch channel is high, whereas when the lowest transmission power is low, the frequency of searching for a new perch channel is low.

30. A mobile communications system including a plurality of base stations and a mobile station which searches for perch channels transmitted by the plurality of base stations to capture and receive the perch channels, and determines which base station to communicate with or to be standby for, said mobile station comprising:

detecting means for detecting a moving speed of the mobile station; and

control means for controlling a frequency of searching for a new perch channel in response to the moving speed detected by said detecting means such that when the moving speed is high, the frequency of searching for a new perch channel is high, whereas when the moving speed is low, the frequency of searching for a new perch channel is low.